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PREPARATORY COMMISSION FOR THE
INTERNATIONAL SEABED AUTHORITY
AND FOR THE INTERNATIONAL TRIBUNAL
FOR THE LAW OF THE SEA
Special Commission 3
New York, 12-30 August 1991

# DRAFT REGULATIONS ON PROSPECTING, EXPLORATION AND EXPLOITATION OF POLYMETALLIC NODULES IN THE AREA

## PART VIII

## PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT FROM UNACCEPTABLE CHANGES RESULTING FROM ACTIVITIES IN THE AREA

Addendum

Preliminary redraft by the Chairman of Special Commission 3 intended to facilitate further consultations, which should provide the basis for a further revision of the working paper*

### Article 1

### Scope of these regulations

1. These regulations apply to the protection and preservation of the marine environment from unacceptable changes resulting from activities in the Area.

2. These regulations apply, inter alia, to:

(a) The prevention, reduction and control of pollution; and

(b) The protection and conservation of the natural resources of the Area.

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* Changes to the original working paper are underscored in the text.

## Article 2

## Use of terms

For the purposes of these regulations:

(1) "marine environment" means the physical, chemical and biological components, conditions and factors which interact and determine the productivity, state, condition and quality of the marine ecosystem, including the coastal area, the waters of the seas and oceans and the airspace above those waters, as well as the seabed and ocean floor and subsoil thereof;

(2) "unacceptable changes* to the marine environment" means changes to the marine environment which will result or are resulting from activities in the Area and which are judged unacceptable according to environmental standards recommended by the Legal and Technical Commission and adopted by the Council;

(3) "impact reference zones" means areas to be used for assessing the effect of each contractor's activities in the Area on the marine environment and designated in each mining site so as to be:

(a) representative of the environmental characteristics of the site; and

(b) located in a portion of the site scheduled to be mined early under the contract;

(4) "preservation reference zones" means areas in which no mining shall occur to ensure representative and stable biota of the seabed in order to assess any changes in the flora and fauna of the marine environment.

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* It should be noted that the textual changes appearing in the present document, including the introduction of the term "unacceptable changes" in the title and in article 1 and the replacement of the terms "harmful effects" and "serious harm" in subsequent articles as well as the replacement in article 2 of the definition of "serious harm" by a definition of "unacceptable changes", are the preliminary proposals of the Chairman. These changes and all others appearing in the document will be considered in depth during the consultations to be conducted by the Chairman.

## PART VIII

## PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT FROM UNACCEPTABLE CHANGES RESULTING FROM ACTIVITIES IN THE AREA

### Article 104

### General obligations

1. States have the obligation to protect and preserve the marine environment from unacceptable changes resulting from activities in the Area.

2. They shall cooperate, directly or through competent international organizations, for the purpose of protection and preservation of the marine environment from unacceptable changes resulting from activities in the Area.

3. Each contractor shall take all necessary measures to ensure compliance with its obligations contained in the contract, and particularly with the obligations with regard to the protection and preservation of the marine environment from unacceptable changes resulting from activities in the Area, and ensure the avoidance of unacceptable changes to the marine environment from activities in the Area and also from disposal of waste, dumping or discharge of sediment, wastes or other effluents into the marine environment.

4. Each contractor shall endeavour to minimize pollution to the fullest possible extent.

5. In case of an incident causing or threatening to result in unacceptable changes to the marine environment arising from the contractor's activities in the Area, the contractor shall respond with necessary and timely action, including measures to prevent, contain, minimize and repair any such unacceptable changes to the marine environment.

### Article 105

### Conditions for carrying out activities in the Area

1. Activities in the Area shall not take place if they cause unacceptable changes to the marine environment.

2. Activities in the Area shall not take place if, inter alia:

(a) no adequate technology and procedures to provide for safe activities and compliance with paragraph 1 are available;

(b) no adequate capacity exists to monitor key environmental parameters and ecosystem components so as to identify any adverse effects of activities; and

(c) no adequate capacity exists to respond effectively to accidents, particularly those which might cause unacceptable changes to the marine environment.

## Article 106

### Exclusion of areas from exploration or exploitation

Upon the recommendation of the Legal and Technical Commission, the Council shall exclude temporarily or permanently areas from exploration or exploitation by contractors in cases where substantial evidence indicates the risk of unacceptable changes to the marine environment.

## Article 107

### Environmental reference zones

1. After the reserved area has been designated in accordance with article 28, the applicant shall propose areas to be set aside and used exclusively as impact reference zones and preservation reference zones.

2. Upon the recommendation of the Legal and Technical Commission and taking into account the proposal of the applicant, the Council shall, at the time of approving the plan of work, set aside parts of the areas covered by the plan of work to be used exclusively as preservation reference zones and impact reference zones.

## Article 108

### Procedure for submission of an environmental report or an environmental impact statement

1. Each applicant shall submit an environmental report 45 days prior to submission of a plan of work for exploration or for exploration and exploitation to the Legal and Technical Commission. This report shall be based on available meteorological, oceanographic and environmental data including those collected during prospecting, and a programme for oceanographic and baseline environmental studies using:

(a) oceanographic (physical, chemical and biological) data of a general as well as of a site-specific nature using standard techniques;

(b) biological data from samples and photographs;

(c) geological data on sediment transport and composition.

2. Each applicant shall submit an environmental impact statement 45 days prior to submission of a plan of work for exploitation to the Legal and Technical Commission. In preparing the environmental impact statement, the applicant shall take into account the experience gained during the exploration stage.

3. In cases where the application is for the approval of a plan of work for exploration and exploitation, each applicant shall submit to the Legal and Technical Commission an environmental impact statement 90 days prior to commencement of exploitation.

Article 109

Environmental impact statement

1. Each environmental impact statement shall be site-specific and shall contain:

(a) data establishing an environmental baseline against which to assess the likely effect of the proposed activities in the Area;

(b) a description of the methods, technology, equipment and procedures to be used;

(c) an assessment of the effects on the marine environment of the proposed activities in the Area, especially of:

(i) the nodule collector in and near the mining tracks;

(ii) the sediment plumes on benthic life, and its food supply, away from the mining activity; and

(iii) the sediment plumes, their drifting and their effect on phytoplankton, zooplankton, fish larvae and other biota.

(d) a contingency plan, specified in article 112, enabling the contractor to respond effectively to accidents, especially those with potential unacceptable changes to the marine environment;

(e) a plan to minimize to the fullest possible extent in accordance with article 104, paragraph 4, pollution of the marine environment arising from the contractor's activities in the Area;

(f) a plan to monitor and report on the effects on the marine environment of the contractor's activities in the Area;

(g) a description of the positions, qualifications, experience and availability of qualified persons on whom the applicant will rely to operate installations and equipment in accordance with the plans.

2. Each plan referred to in subparagraphs (d), (e) and (f) of paragraph 1 shall contain a description of the methods, technology and equipment proposed to be used in connection with the plan, the applicant's experience in using it and its reliability.

## Article 110

## Consideration of an environmental report or an environmental impact statement

1. Upon receipt of an environmental report or environmental impact statement, the Secretary-General shall immediately circulate it to States Parties and make it publicly available.

2. The Legal and Technical Commission shall examine each environmental report or environmental impact statement and plans contained therein. Any State may provide the Legal and Technical Commission with information and comments on the environmental report or environmental impact statement. The Legal and Technical Commission shall determine, taking into account the analyses and information contained in the applicant's report or statement as well as possible information and comments from States Parties, whether the exploration or exploitation can be reasonably expected to result in unacceptable changes to the marine environment.

3. If the Legal and Technical Commission finds that an environmental report or environmental impact statement does not comply with these regulations, or is otherwise incomplete or defective, or that the proposed plans do not ensure the effective protection and preservation of the marine environment, it shall notify the applicant. The applicant may submit an amended report or statement to the Legal and Technical Commission within a reasonable time.

4. The Legal and Technical Commission shall make its report and recommendation to the Council within a reasonable time from the date of receipt of each environmental report or environmental impact statement or from the date of receipt of an amended report or statement.

5. The Legal and Technical Commission may request an independent expert to assess whether all data required by these regulations have been submitted.

6. Upon receiving the Legal and Technical Commission's report and recommendation, the Council may exclude parts of the application areas for exploitation by contractors in cases where substantial evidence indicates unacceptable changes can be caused to the marine environment.

## Article 111

### Terms and conditions for the protection and preservation of the marine environment

Each contract shall contain provisions for the protection and preservation of the marine environment from activities in the Area including, inter alia:

(a) a plan to monitor and report on the effects of the contractor's activities in the Area on the marine environment;

(b) requirements to avoid unacceptable changes to the marine environment that may result from activities in the Area carried out by the contractor and to minimize to the fullest possible extent the risk of unacceptable changes to the marine environment;

(c) requirements to use the best available technology for the protection and preservation of the marine environment;

(d) the specific data and information to be submitted in the contractor's reports on the effect of its activities in the Area on the marine environment; and

(e) a contingency plan to respond effectively to incidents which are likely to cause unacceptable changes to the marine environment arising from the contractor's activities in the Area.

## Article 112

### Contingency plans

1. Contingency plans shall establish special procedures for dealing with incidents which have resulted or are about to result in unacceptable changes to the marine environment arising from the contractor's activities in the Area.

2. The contingency plan shall establish appropriate measures for dealing effectively with contingencies and, in particular, shall include arrangements for:

(a) the immediate raising of an alarm in the area of the activities;

(b) prompt notification to the Secretary-General and neighbouring coastal States;

(c) the warning, as may be necessary, of coastal States whose waters are likely to be seriously affected or suffer unacceptable changes and ships which might be about to enter the immediate vicinity;

(d) a continuing flow of full information relating to particulars of the contingency, measures already taken and further action required, to the Secretary-General;

(e) neutralization, including the removal, as appropriate, of polluting substances;

(f) the reduction and, in so far as possible, prevention of unacceptable changes to the marine environment, as well as mitigation of such effects;

(g) as appropriate, cooperation among contractors to respond to a contingency; and

(h) periodic emergency exercises.

## Article 113

## Annual reports

1. Each contractor shall submit an annual report on the effects of the contractor's activities in the Area on the marine environment to the Secretary-General within 90 days after the end of each calendar year.

2. Each report shall contain such data and information as shall be specified in the contract.

3. The report shall be made publicly available.

## Article 114

## Reports of serious harm to the marine environment

1. Each contractor shall promptly report to the Secretary-General any incident arising from its activities in the Area which are likely to cause unacceptable changes to the marine environment.

2. Each such report shall contain the details of such incident, including, inter alia:

(a) the coordinates of the area affected or which can reasonably be anticipated to be affected;

(b) the effect such incident is likely to have on the marine environment;

(c) the description of the action being taken to prevent, contain, minimize and repair the unacceptable changes to the marine environment;

(d) a description of the action being taken to monitor the effects of the incidents on the marine environment;

(e) such other information as may be required by the rules and regulations of the Authority.

Article 115

Inspectors

1. Each contractor shall permit the Authority to send its inspectors on board vessels and installations used by the contractor to carry out activities in the Area in order to monitor the contractor's compliance with the terms and conditions of the contract and with these regulations concerning the protection and preservation of the marine environment from unacceptable changes resulting from activities in the Area.

2. Each contractor shall assist the inspectors in the performance of their duties and provide:

(a) information on performance on all relevant equipment, facilities and personnel on vessels and installations;

(b) access, at all reasonable times, to all relevant equipment, facilities and personnel on vessels and installations.

3. Each inspector shall have access to the records of any vessel or installation, including its log and documentation, and all other recorded data which are necessary for monitoring the contractor's compliance.

4. Inspectors shall avoid interference with the safe and normal operations on board vessels and installations used by the contractor to carry out activities in the Area visited and shall observe the confidentiality of data and information of commercial value in accordance with the rules and regulations adopted by the Authority.

5. Inspections shall not impose an undue burden on the operation of vessels and installations visited.

6. No contractor or employee of a contractor shall interfere with inspectors in the performance of their duties.

7. The Secretary-General shall give reasonable notice to the contractor of, inter alia:

(a) the name of the inspector;

(b) the length of time which the inspector is likely to be on board a vessel or installation; and

(c) activities of the inspector that are likely to require assistance from personnel of the vessel or installation to facilitate the performance of his task.

8. The inspectors shall transmit their reports to the Secretary-General who will subsequently transmit them to the sponsoring State.

## Article 116 (118)

## Rights and legitimate interests of coastal States

1. Any coastal State which has clear grounds for believing that any activity in the Area by a contractor is likely to cause unacceptable changes to the marine environment under its jurisdiction or sovereignty may notify the Secretary-General and request that he take the necessary action within his competence to prevent unacceptable changes.

2. Upon receipt of such notification, the Secretary-General shall notify the contractor and the sponsoring State or States, as well as other States that could be affected, and transmit the notification to the Legal and Technical Commission and the Council.

3. Neither these regulations nor any rights granted or exercised pursuant thereto shall affect the rights of coastal States to take such measures consistent with the relevant provisions of Part XII of the Convention or with other relevant international agreements as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline, or related interests from pollution or threat thereof or from other hazardous occurrences resulting from or caused by any activities in the Area.

## Article 117 (119)

## Emergency orders

1. In the event that the Secretary-General is notified of an incident causing unacceptable changes to the marine environment arising from a contractor's activities in the Area, he shall transmit it immediately to the Council and the Legal and Technical Commission.

2. Pending any action by the Council the Secretary-General may take any immediate measures, which should be practical and reasonable in the circumstances, to prevent unacceptable changes to the marine environment, including measures to contain, minimize and repair the unacceptable changes.

3. The Legal and Technical Commission shall meet as soon as possible after having received the report on the unacceptable changes to the marine environment and shall consider, taking into account the measures already taken by the contractor, which measures are necessary to respond effectively to the

accident and to contain, minimize and repair the unacceptable changes. It shall make relevant recommendations to the Council.

4. After having received the recommendations of the Legal and Technical Commission the Council shall meet as soon as possible and decide on the recommendations submitted by the Legal and Technical Commission.

5. Taking into account the recommendations of the Legal and Technical Commission the Council may issue emergency orders which may include orders for the suspension or adjustment of operations, to prevent unacceptable changes to the marine environment arising out of activities in the Area.

## Article 118 (120)

### Authority to take measures to protect and preserve the marine environment

If a contractor does not take the action required by the terms and conditions of its contract after having received an order by the Secretary-General or does not promptly comply with an emergency order to prevent unacceptable changes to the marine environment arising out of activities in the Area, the Council:

(a) shall modify or prohibit the contractor's activities which have resulted or are about to result in unacceptable changes to the marine environment until the contractor undertakes measures referred to in paragraph 5 of article 104;

(b) may take by itself or through arrangements with others on its behalf such measures as are necessary to prevent and contain, minimize or repair any such unacceptable changes to the marine environment.

## Article 119 (121)

### Responsibility of the sponsoring State or States

1. The sponsoring State or States shall, pursuant to article 139 of the Convention, have the responsibility to ensure, within their legal systems, that a contractor so sponsored shall carry out activities in the Area in conformity with the terms of its contract and its obligations under the Convention with respect to the protection and preservation of the marine environment from activities in the Area.

2. The sponsoring State has the obligation to inspect at regular intervals to be determined by the Council its contractor's activities in the Area in order to ensure compliance with the rules and regulations of the Authority as well as the terms and conditions of the contract. The sponsoring State shall transmit the reports of its inspectors to the Council.

3. In cases where there are two or more sponsoring States for one contractor, the sponsoring States shall determine which of them has to conduct the inspection specified in paragraph 2. They shall inform the Council of their decision.

4. A sponsoring State shall not be liable for damage caused by any failure of a contractor sponsored by it to comply with its obligations if that State Party has adopted laws and regulations and taken administrative measures which are, within the framework of its legal system, reasonably appropriate for securing compliance by persons under its jurisdiction.

## Article 120 (122)

### Liability for causing unacceptable changes to the marine environment

1. A contractor shall be liable for:

(a) unacceptable changes to the marine environment resulting from its activities in the Area, including payment in the event that the contractor has not taken adequate action in the opinion of the Council to prevent and contain, minimize and repair the unacceptable changes;

(b) loss of life or personal injury of a third party or loss of or damage to property of a third party arising out of damage described in subparagraph (a);

(c) reimbursement of reasonable costs incurred pursuant to article 118.

2. The contractor shall not be liable pursuant to paragraph 1 if he proves that unacceptable changes to the marine environment have been caused directly by, and to the extent that they have been caused directly by:

(a) an event constituting a natural disaster of an exceptional character which could not reasonably have been foreseen;

(b) armed conflict or an act of terrorism directed against the activities of the contractor, against which no reasonable precautionary measures could have been effective.

3. If a contractor proves that damage has been caused totally or in part by an intentional or grossly negligent act or omission of the party seeking redress, that contractor may be relieved totally or in part from its obligation to pay compensation in respect of the damage suffered by such party.

4. Nothing in this article shall be construed so as to:

(a) preclude the application of existing rules on liability and the development in accordance with international law of further such rules; or

(b) affect the right of a contractor incurring liability pursuant to this article to seek redress from another party which caused or contributed to the damage in question.

5. When compensation has been paid to a third party in respect of an incident referred to in paragraph 1 (b) other than under this Convention, liability in respect of such incident under this Convention shall be offset by the amount of such payment.

6. Any party to a dispute concerning the liability of a contractor for such damage, the amount of compensation or whether such compensation has been paid promptly, may submit the dispute to the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea, or to special arbitration in accordance with Annex VIII of the Convention.

7. Any final decision rendered by the Chamber or special arbitration shall be enforceable in the territory of each State party.

## Article 121 (123)

## Penalties

1. A contractor's rights under the contract may be suspended or terminated only in the following cases:

(a) if, in spite of warnings by the Authority, the contractor has conducted his activities in such a way as to result in serious, persistent and wilful violations of the fundamental terms of the contract, relating to the protection and preservation of the marine environment from activities in the Area and these regulations or other regulations of the Authority; or

(b) if the contractor has failed to comply with a final binding decision of the dispute settlement body referred to in article 120, paragraph 6.

2. In the case of any violation of the contract not covered by paragraph 1 (a), or in lieu of suspension or termination under paragraph 1 (a), the Authority may impose upon the contractor monetary penalties.

3. Sanctions determined pursuant to paragraphs 1 and 2 above shall be proportionate to the seriousness of the violation.

4. Except for emergency orders under article 117, the Authority may not execute a decision involving monetary penalties, suspension or termination until the contractor has been accorded a reasonable opportunity to exhaust the judicial remedies available to him pursuant to Part XI, section 5, of the Convention.

Article 122 (124)

Monitoring programme of the Authority

1. The Legal and Technical Commission shall make recommendations to the Council regarding the establishment of a monitoring programme to observe, measure, evaluate and analyse, by recognized scientific methods, on a regular basis, the effects of activities in the Area on the marine environment, including the risks or effects of pollution.

2. The Commission shall prepare assessments of the environmental implications of activities in the Area, taking into account, inter alia, annual reports of the contractors specified in article 113.

3. The Council shall consider the recommendations of the Legal and Technical Commission and approve the establishment of a monitoring programme.

4. The Legal and Technical Commission shall ensure that existing regulations are adequate and are complied with and coordinate the implementation of the monitoring programme approved by the Council.

Article 123 (125)

Data not to be deemed proprietary

Data necessary for the formulation by the Authority of rules, regulations and procedures concerning protection and preservation of the marine environment and safety, other than equipment design data or methods of analysis and monitoring, shall not be deemed proprietary.

Article 124 (126)

Application of these regulations to the Enterprise

These regulations apply mutatis mutandis to the activities of the Enterprise in the Area.

Article 125 (127)

Rules, regulations and procedures concerning the protection and preservation of the marine environment

1. The Council shall adopt, upon the recommendation of the Legal and Technical Commission, rules and regulations which elaborate the principles in article 2, paragraph 2.

2. The Legal and Technical Commission shall re-examine from time to time, as necessary, the rules, regulations and procedures of the Authority to protect and preserve the marine environment from activities in the Area and make appropriate recommendations to the Council in accordance with paragraph 1, taking into account the views of recognized experts in that field.

Article 126 (128)

Disputes

Disputes concerning the interpretation or application of these regulations shall be submitted to either the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea or to special arbitration in accordance with Annex VIII of the Convention.

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